

# **ANTIOXIDANT ACTIVITY OF THE PEELS OF GUAVA, PAPAYA AND PINEAPPLE**

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## ABSTRACT

### ANTIOXIDANT ACTIVITY OF THE PEELS OF GUAVA, PAPAYA AND PINEAPPLE

The antioxidant activity of the peels of guava, papaya and pineapple was evaluated by 2, 2 – diphenyl -1- picrylhydrazyl (DPPH) method. This study was carried out to determine the total phenolic content (TPC) of these peels of fruits. For this testing, ethanol and water was used as extracting solvent. The total phenolic content of the crude extract of peels were determined from the standard calibration curve of gallic acid. From the results, it showed that the ethanol extract had higher total phenolic content than the water extract for all of fruits peel extract. In *guajava psidium*, value of ethanol extract is (1210 mg GAE/g ) compared water extract (324 mg GAE/g), *carica papaya* (353.2 mg GAE/g) for ethanol extract compared to water extract is (102.4 mg GAE/g) and also for *ananas comosus* with ethanol extract (236.4 mg GAE/g) compared to water extract (80 mg GAE/g). Ethanol extract also showed the higher radical scavenging for all of fruits peel. For *guajava psidium*, ethanol extract showed (98.4 %) compared to water (76.9%). While for radical scavenging activities of *carica papaya* in ethanol extract was (83%) compared water extract was (82.7%). Ethanol extract of *ananas comosus* peel also showed higher scavenging activities with (76.1%) compared to water extract was (73.3%). From the testing on 2, 2 – diphenyl- 1- hydrazyl (DPPH) method, it showed that the extract of *guajava psidium* had high radical scavenging activities and also had high total phenolic content .